

Aquatic Plant Management

South Carolina Department of Natural Resources

WATER SHIELD

Brasenia schreberi

Common Name

Water Shield/Dollar Bonnet

Distribution and Habitat

Water shield is found statewide, but it is most common in the midlands and coastal plain of South Carolina. This plant thrives in clear, acid waters in depths up to five feet. It is often found in ponds in the sandhills region of the midlands, growing in association with water milfoil, water lily or bladderwort.

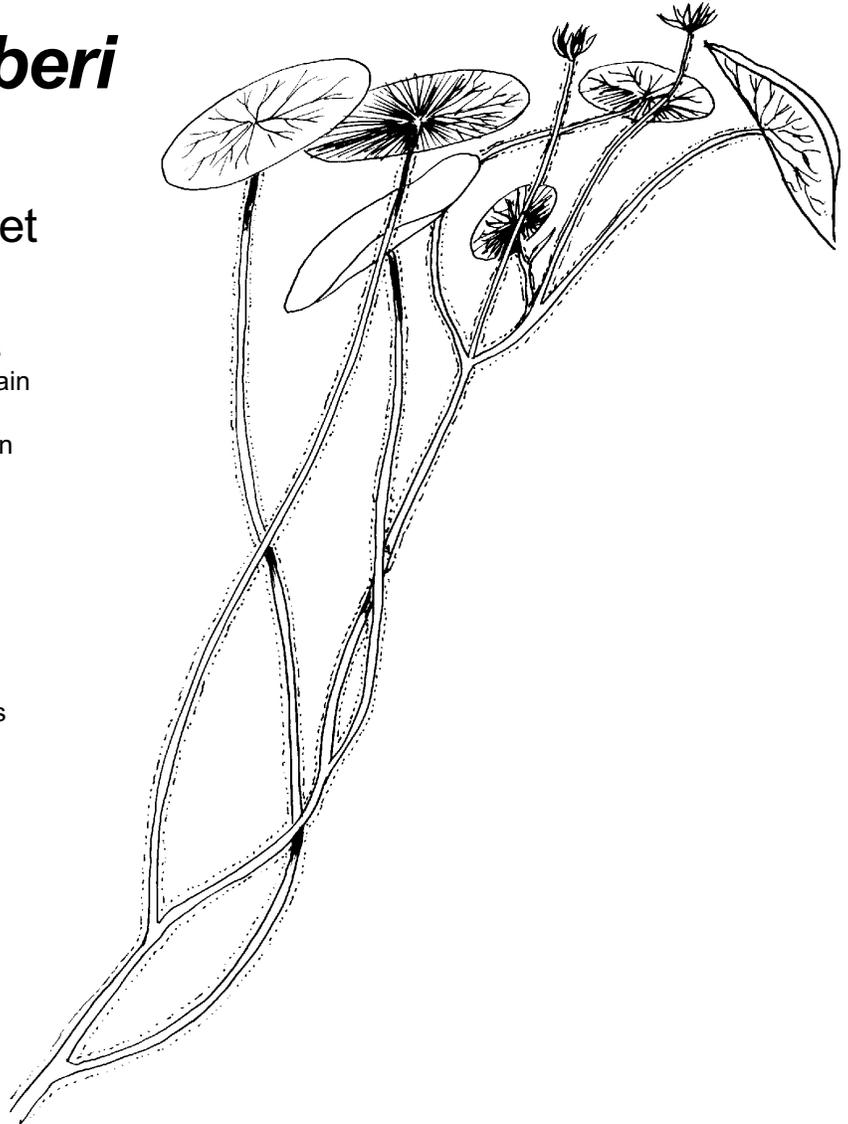
Description

Water shield has floating leaves which are oval to elliptical in shape with smooth edges. They may be from one to three inches in length. The long branching stem arises from a creeping rootstock and is attached at the center of the leaf. Leaves are green above and deep purple-red below. The stem and underside of the leaf have a characteristic slimy, gelatinous coating. The dull purple flowers of water shield are small and inconspicuous.

Recommended Control

Methods

1. Granular 2, 4-D
Active Ingredients: Ester of 2, 4-Dichlorophenoxyacetic acid
Product Names: Aqua-Kleen/Riverdale/Weedtrine II
Approximate Cost: \$1.80/lb. - \$90.00/50 lbs.
Application Rates: 150 - 200/lbs/acre
(100 lbs/acre is equivalent to approximately 5 lbs/2000 sq. ft.)



Application Methods and Tips: Granular 2, 4-D is most effective against water shield during early season growth before the plants mature. This product should be applied in a broadcast fashion by the use of a fertilizer or seed spread to ensure uniform coverage of the treatment area. Generally control will be confined only to those areas in which the herbicide is applied. Higher rates will be required in areas of dense growth, water greater than five feet or ponds with a short retention time (high volume turnover). Care should be exercised when treating ponds with dense growth of vegetation to prevent oxygen depletion due to decomposing plants. No

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more than one-third of the pond should be treated at once, allowing 14-21 days between applications. Certain water use restrictions are associated with the use of this herbicide. Additional product directions and precautionary statements are listed on the herbicide container. **READ AND FOLLOW THE HERBICIDE LABEL.**

Consult your district fisheries biologist for more details concerning use of these products.

2. Sonar

*This product's label list water shield as a species in which the herbicide will provide only partial control.

*Contact your local fisheries biologist for more details concerning the use of this product.

3. Sterile Grass Carp (White Amur)

Grass carp are generally not considered as an effective alternative for the control of water shield.

This information is intended for educational purposes only. References to commercial products or trade names is made with the understanding no discrimination is intended of other products which maybe available. Any herbicides recommended herein for the treatment of aquatic vegetation have been registered by the Environmental Protection Agency for use in the manner described. The registration and use of a particular product may change therefore the information provided here may not remain current indefinitely. It is the responsibility of the user to read and follow the manufacturer's label to prevent misuse of the product.



South Carolina Department of Natural Resources
Freshwater Fisheries Section

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